do/521108

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE DATENE TO THE PARTY (PCT)

(19) World Intellectual Property Organization International Bureau



) (1888) 1888) 18 (1888) 1881) 1888)

(43) International Publication Date 22 January 2004 (22.01.2004)

PCT

(10) International Publication Number WO 2004/008301 A3

(51) International Patent Classification7:

G06F 3/023

(21) International Application Number:

PCT/EP2003/008477

(22) International Filing Date:

10 July 2003 (10.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 02368076.2

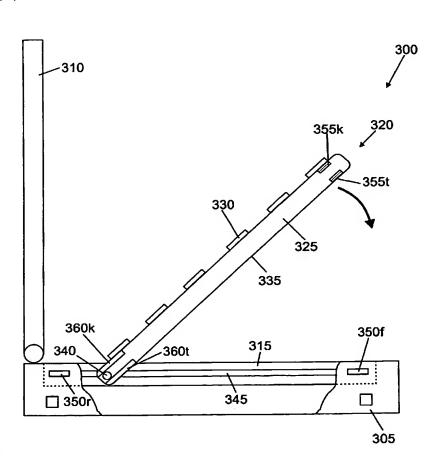
11 July 2002 (11.07.2002) EP

- (71) Applicant (for all designated States except US): INTER-NATIONAL BUSINESS MACHINES CORPORA-TION [US/US]; New Orchard Road, Armonk, NY 10504 (US).
- (71) Applicant (for MC only): COMPAGNIE IBM FRANCE [FR/FR]; Tour Descartes, La Défense 5, 2, Avenue Gambetta, F-92400 Courbevoie (FR).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LONGOBARDI, Giuseppe [IT/IT]; Via Aristide Leonori, 42, I-00100 Roma (IT). CAGGESE, Sergio [IT/IT]; Via Monte dei Nove Draghi 14B5, I-00144 Roma (IT). ZU, Luciano [IT/IT]; Via Collatina 40, I-00177 Roma (IT).
- (74) Agent: ZERBI, Guido; Compagnie IBM France, Direction de la Propriété Intellectuelle, F-06610 La Gaude (FR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: A PERIPHERAL DEVICE FOR A DATA PROCESSING SYSTEM



(57) Abstract: A peripheral device (320) for use in a data processing system (300) is proposed. peripheral device includes a panel (320) carrying a mechanical keyboard (330) and a touch-screen (335) on opposed surfaces. The panel may be turned upside down, so as to make available either the keyboard or the touch-screen. In this way, the keyboard may be used when working with applications doing ordinary computing work; in addition, the touch-screen may be used as an alternative input/output unit that is configurable to meet the needs of different applications. For example, the touch-screen displays a colored console when playing games, a navigation toolbar when surfing on the INTERNET, a piano keyboard when playing music, and so on.



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

with international search report

- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 16 September 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

Interactional Application No PCT/EP 03/08477

A. CLASSIF IPC 7	GOOF 3/023		
According to	International Patent Classification (IPC) or to both national classification	on and IPC	
B. FIELDS S			
IPC 7	cumentation searched (classification system followed by classification $G06F$	symbols)	
Documentati	ion searched other than minimum documentation to the extent that suc	In that such documents are included in the fields searched data base and, where practical, search terms used) INSPEC, COMPENDEX In the relevant passages Relevant to claim No. In the relevant passages Relevant to claim No. In the relevant passages Relevant to claim No. In the relevant passages In the relevant passages Relevant to claim No. In the relevant passages In the relevant passages Relevant to claim No. In the relevant passages In the	
Electronic da	ata base consulted during the international search (name of data base	and, where practical, search terms used)	
EPO-Int	ternal, WPI Data, PAJ, IBM-TDB, INSPE	EC, COMPENDEX	
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with Indication, where appropriate, of the relev	vant passages	Relevant to claim No.
X	US 5 892 502 A (HILLER JEFFREY H) 6 April 1999 (1999-04-06) abstract figures 2-4		1,2,7,8, 12
	column 2, line 57 - column 3, line column 3, line 21 - line 29	e 14	
Χ ·	US 6 243 258 B1 (PARATORE ROBERT M) 5 June 2001 (2001-06-05) abstract figures 1-3,5 column 3, line 3 - column 4, line 42 column 5, line 18 - line 42		1-8,12
Α	Corumn 3, Time 10 Time 42		9-11
А	EP 0 672 980 A (IBM) 20 September 1995 (1995-09-20) page 9, line 22 - line 57 figures 2A,2B,3A,3B		3,4,9-11
Funt	ther documents are listed in the continuation of box C.	X Patent family members are listed	in annex.
"A" docume consic "E" earlier of filing c "L" docume which citatio "O" docume other "P" docume later ti	ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another on or other special reason (as specified) ment referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but than the priority date claimed	or priority date and not in conflict with cited to understand the principle or the invention "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the decannot be considered to involve an indocument is combined with one or ments, such combined with one or ments, such combination being obvious the art. "&" document member of the same patent.	the application but every underlying the claimed invention is be considered to cument is taken alone claimed invention wentive step when the ore other such docuus to a person skilled
	actual completion of the international search 28 June 2004		
	mailing address of the ISA		
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016		Eraso Helguera, J	

INTERNATIONAL SEARCH REPORT

Internal Application No PCT/EP 03/08477

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5892502	. A	06-04-1999	NONE		
US 6243258	B1	05-06-2001	NONE		
EP 0672980	A	20-09-1995	US AT BR CA DE DE DE JP ES JP KR TW	5681220 A 196202 T 9501130 A 2142800 A1 1119297 A ,B 69518681 D1 69518681 T2 0672980 A2 2149923 T3 2745499 B2 7261898 A 160803 B1 403215 Y	28-10-1997 15-09-2000 09-04-1996 18-12-1995 27-03-1996 12-10-2000 31-05-2001 20-09-1995 16-11-2000 28-04-1998 13-10-1995 15-12-1998 21-08-2000